#### **HVAC SYSTEMS**

During flooding, systems for heating, ventilating and air conditioning can become submerged in flood waters. As a result, these systems may contain substantial amounts of dirt and debris and may also become contaminated with various types of microorganisms such as bacteria and fungi. Therefore, all components of the HVAC system that were contaminated with flood water or moisture should be thoroughly inspected, cleaned of dirt and debris and disinfected by a qualified professional. Use someone who ascribes to the methods of The National Air Duct Cleaners Association (NADCA).

#### Water And Food Safety

- Throw away food that may have come in contact with flood or storm water.
- Food containers with screw-caps, snaplids, crimped caps, twist caps, flip tops, snap open and home canned foods should be discarded if they have come into contact with floodwater because they cannot be disinfected.
- If cans have come in contact with flood water or storm water, remove the labels, wash the cans and dip them in a solution of 1 cup of bleach in 5 gallons of water. Relabel the cans with a permanent marker.
- Do not use contaminated water to wash dishes, brush you teeth, wash and prepare food, wash you hands, make ice or baby formula,



Government of the District of Columbia Anthony A. Williams, Mayor

# District of Columbia Department of Health

# **Emergency Health and Medical Services Administration**

64 New York Avenue, NE, Suite 5000 Washington, DC 20002



#### Sources:

2-1-1 Maine, Inc.
Massachusetts Emergency Management Agency
University of Wisconsin

## District of Columbia

**Department of Health** 

# Recovering From A Flood



Emergency Health and Medical Services Administration





### **Recovering From A Flood**

This document is intended to provide some helpful hints to the general public relative to managing pathogen risks as a result of direct contact with flood waters and/or sewage backups. The following recommendations will help ensure that environments and systems contaminated with flood water are properly cleaned and remediated.

# Cleaning Up After the Flood

Wear protective clothing on legs, arms, feet and hands while cleaning up debris.

Wash any exposed skin frequently in purified water.

To remove surface oil scrub with a household cleaner/detergent solution and a brush.

Wash with a disinfectant, such as chlorine bleach, pine oil or a phenolic product, such as Lysol. Disinfectant products are labeled as such. Rinse well.

To prevent mildew dry items thoroughly. Though carpeting may often be cleaned, sometime the padding may need to be replaced.

Sanitize all dishes, cooking utensils and food preparation areas before using them. Special attention should be paid to cleaning children's toys, cribs, playpens and play equipment. Discard stuffed toys, water-logged toys and non-cleanable items. Any items a toddler or baby might put in his or her mouth should be boiled.

### Removing Mold And Mildew

To prevent scattering spores in the house, brush off mold and mildew growth on household items outdoors.

Vacuum floors, ceilings and walls to remove mildew. Then wash all surfaces with a detergent/household cleaner and water solution.

Mildew-stained areas should be wiped with a cloth dampened with a solution of 1 cup chlorine bleach or rubbing or

denatured alcohol to 1 gallon water. Pine-based or phenolic products also work well.

### Preventing Mildew Growth

To remove moisture, use an air conditioner, dehumidifier or heater, if available. Use fans and open all windows to circulate air.

To dry dampness and humidity turn on electric lights in closets and leave doors open. Use a spray with a fungicide or other mildew preventive product. Make sure to read and follow instructions and precautions on product label. Dry thoroughly.

#### Flooded Private Sewage Systems

If you suspect damage to your septic tank, have it professionally inspected and serviced. Signs of damage include settling or inability to accept water. Most septic tanks are not damaged by a flood since they are below ground and completely covered. However, sometimes septic tanks or pump chambers become filled with silt and debris, and must be professionally cleaned. If tile lines in the disposal field are filled with silt, a new system may have to be installed in new trenches. Because septic tanks may contain dangerous gases, only trained specialist should be clean or repair them.

If sewage has backed up into the basement, clean the area and disinfect the floor with a chlorine solution of one-half cup of chlorine bleach to 1 gallon of water.

Do not drink the water until it has been tested.

#### Eliminating Standing Water

Dispose of cans, bottles, and plastic containers. Store items to be recycled in covered trash cans or sealed bags.

Eliminate discarded tires. Drill drainage holes in tires used for playground equipment.

Place lids tightly on garbage cans to prevent water from collecting.

Flush birdbaths and the bottom of potted plant holder trays twice a week.

Clean leaves and debris from gutters.

Remove standing water from beneath air conditioners.

Store pet food and water bowls indoors when not in use.

Treat areas such as fishponds that cannot be drained with mosquito "dunks". Dunks contain bacteria, which will kill mosquito larva. Dunks will not harm fish.

### **Recovery Resources**

Call WASA if you detect human waste or if water has come out of your toilet from the flooding. (This is common in those areas serviced by the "Combined Sewer" (CSO) system)

If you find dead animals or smell gas leaks (rotten egg smells) Contact EHMSA (671-5000), FEMS (911) and Washington Gas 703-750-1400 or 1-800-752-7520.)

If household chemical containers have leaked call **DDOE HAZWASTE** (535-2290)

If you are concerned about mold, go to <a href="https://www.EPA.gov">www.EPA.gov</a> or call **DOH** (671-5000) and **DDOE** (535-2250)

#### What if it is really bad?

Use a water and flood restoration professional who ascribes to "*HCRC*" methods.

Contact insurance company if applicable. Damaged sewage systems are serious health hazards. Contact the **WASA emergency hotline:** (202) 612-3400 if you observe major leaks.

For Additional Health Information, Contact The District of Columbia Department of Health Call Center At 202-671-5000 Between The Hours of 7:30 am and 6:00 pm.